

unless  
what the  
programs are

5           image process means for subjecting the image data  
input by the image input means to a predetermined image  
process;

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        image output means for outputting the image data
        processed by the image process means;

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15           second program storage means for storing the image  
process programs input by the program input means; and

2. An image processing apparatus according to claim 1, wherein the image input means is a scanner.

4. An image processing apparatus according to

claim 1, wherein the image output means is a printer.

5. An image processing apparatus according to claim 1, wherein the second program storage means is one of a RAM and a hard disk drive.

5 6. An image processing apparatus according to claim 1, wherein the second image process program stored in the second program storage means is an image process program for performing an extension image process such as image editing process, other than a  
10 basic image process.

7. An image processing apparatus according to claim 1, wherein the program loading means is a CPU.

8. An image processing apparatus comprising:  
15 image input means for inputting image data on an original;

image process means for subjecting the image data input by the image input means to a predetermined image process;

20 first program storage means for storing an image process program for performing the image process to be executed by the image process means;

image output means for outputting the image data processed by the image process means;

25 state detection means for detecting a state of the image output means;

program input means for inputting an optimal image process program from outside, on the basis of a

detection result of the state detection means;

second program storage means for storing image process programs input by the program input means; and

5        program loading means for reading out a desired  
image process program from the second program storage means on the basis of input information from outside, and loading the read-out desired image process program into the first program storage means.

9. An image processing apparatus according to  
10       claim 8, wherein the program input means determines an image quality of an output image from the image output means on the basis of the detection result of the state detection means, and where the image quality of the  
15       output image has been determined to have a problem, the program input means inputs, from outside, a new image process program based on the detection result of the state detection means.

10. An image processing apparatus comprising:

20       image input means for inputting image data on an original;

arithmetic means for subjecting the image data input by the image input means to a predetermined image process arithmetic operation;

25       first program storage means for storing an arithmetic program for performing the image process arithmetic operation to be executed by the arithmetic means;



program loading means for reading out an optimal  
5 one of the arithmetic programs from the second program  
storage means on the basis of input information from  
outside, and loading the optimal arithmetic program  
into the first program storage means.

14. An image processing apparatus comprising:

arithmetic means for subjecting the image data  
input by the image input means to a predetermined image  
process arithmetic operation;

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        image output means for outputting the image data
25     processed by the arithmetic means;

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second program storage means for prestoring arithmetic programs for performing the image process

arithmetic operation; and

program loading means for reading out an optimal one of the arithmetic programs from the second program storage means in accordance with the scan mode of the image input means, and loading the optimal arithmetic program into the first program storage means.

15. An image processing apparatus according to claim 14, wherein said plurality of scan modes are a pre-scan mode and a main scan mode.

10 16. An image processing apparatus according to claim 15, wherein the program loading means has image characteristic discrimination means for discriminating a characteristic of image data input by the image input means in the pre-scan mode, and the program loading means reads out an optimal one of the arithmetic programs from the second program storage means on the basis of a discrimination result of the image characteristic discrimination means and loads the optimal arithmetic program into the first program storage means.

17. An image processing apparatus according to claim 16, wherein the image characteristic discrimination means discriminates whether the original is a character original, a character/photo original, or a photo original, on the basis of the image data input by the image input means in the pre-scan mode.

18. An image processing apparatus comprising:

arithmetic means for subjecting the image data  
input by the image input means to a predetermined image  
5 process arithmetic operation;

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10         image output means for outputting the image data
        processed by the arithmetic means;

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second program storage means for prestoring  
15 arithmetic programs for performing the image process  
arithmetic operation; and

program loading means for reading out a desired arithmetic program from the second program storage means on the basis of a detection result of the state detection means, and loading the read-out desired arithmetic program into the first program storage means.

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image input means for inputting image data on an
original;
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25            arithmetic means for subjecting the image data  
input by the image input means to a predetermined image  
process arithmetic operation;

first program storage means for storing an arithmetic program for performing the image process arithmetic operation to be executed by the arithmetic means;

5 image output means for outputting the image data processed by the arithmetic means;

second program storage means for prestoring arithmetic programs for performing the image process arithmetic operation;

10 first program loading means for reading out a desired arithmetic program from the second program storage means on the basis of input information from outside, and loading the read-out desired arithmetic program into the first program storage means;

15 frequency-of-use data storage means for storing data on frequency of use of the arithmetic programs stored in the second program storage means; and

second program loading means for reading out an arithmetic program with a high frequency of use from  
20 the second program storage means on the basis of the frequency-of-use data stored in the frequency-of-use data storage means, and loading the read-out arithmetic program into the first program storage means.

20. An image processing apparatus comprising:

25 image input means for inputting image data on an original;

arithmetic means for subjecting the image data



input by the image input means to a predetermined image process arithmetic operation;

first program storage means for storing an arithmetic program for performing the image process  
5 arithmetic operation to be executed by the arithmetic means;

image output means for outputting the image data processed by the arithmetic means;

second program storage means for prestoring  
10 arithmetic programs for performing the image process arithmetic operation;

program loading means for reading out a desired arithmetic program from the second program storage means on the basis of input information from outside,  
15 and loading the read-out desired arithmetic program into the first program storage means; and

display means for displaying information stored in the first program storage means and the second program storage means on the basis of instruction information  
20 input from outside.

21. An image processing apparatus according to claim 20, wherein the display means is a liquid crystal display section provided on a control panel of the image processing apparatus.

25 22. An image processing apparatus comprising:

image input means for inputting image data on an original;

arithmetic means for subjecting the image data input by the image input means to a predetermined image process arithmetic operation;

5 first program storage means for storing an arithmetic program for performing the image process arithmetic operation to be executed by the arithmetic means;

image output means for outputting the image data processed by the arithmetic means;

10 second program storage means for prestoring arithmetic programs for performing the image process arithmetic operation;

program loading means for reading out a desired arithmetic program from the second program storage means on the basis of input information from outside, and loading the read-out desired arithmetic program into the first program storage means;

15 information visualizing means for visualizing information stored in the first program storage means and the second program storage means on the basis of instruction information input from outside; and

20 recording means for recording on a recording medium the visualized information obtained from the information visualizing means.

25 23. An image processing apparatus according to claim 22, wherein the recording means is a printer.